

Day : Wednesday

Date: 8/3/2005

Time: 09:06:51

 **PALM INTRANET**

Inventor Information for 10/632101

Inventor Name	City	State/Country
CIUFOLINI, MARCO	LYON	FRANCE
WERMUTH, CAMILLE GEORGES	STRASBOURG	FRANCE
GIELTHEN, BRUNO	ILLKIRCH	FRANCE
MOUSSY, ALAIN	PARIS	FRANCE

[Appln Info](#)[Contents](#)[Petition Info](#)[Atty/Agent Info](#)[Continuity Data](#)[Foreign Data](#)

Search Another: Application#

or Patent#

PCT /


/

or PG PUBS #

Attorney Docket #

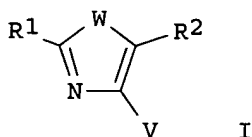
Bar Code #

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8/3/05

L19 ANSWER 12 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:591161 CAPLUS
 DOCUMENT NUMBER: 139:149626
 TITLE: Preparation of 4-(hetero)aryl-substituted thia-, oxa-,
 and pyrazoles for inhibition of Tie-2
 INVENTOR(S): Stieber, Frank; Hellmuth, Klaus; Waldmann, Herbert;
 Mazitschek, Ralph; Giannis, Athanassios
 PATENT ASSIGNEE(S): Kylix Pharmaceuticals B.V., Neth.
 SOURCE: PCT Int. Appl., 164 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003062215	A1	20030731	WO 2003-EP810	20030127
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003158199	A1	20030821	US 2002-57747	20020125
CA 2474322	AA	20030731	CA 2003-2474322	20030127
EP 1467981	A1	20041020	EP 2003-731722	20030127
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
PRIORITY APPLN. INFO.:			EP 2002-75367	A 20020125
			US 2002-57747	A 20020125
			WO 2003-EP810	W 20030127
OTHER SOURCE(S):	MARPAT 139:149626			
GI				



AB Azoles I [W = NH, O, S; V = H, (un)substituted 5-6-membered heterocycle; R1 = H, alkyl, alkenyl, cycloalkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, alkylaryl, (un)substituted NH2; R2 = H, alkyl, alkenyl, cycloalkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, alkylaryl, carboxyl, Br, Cl, F, CF3] were prepared for use as inhibitors of Tie-2 tyrosine kinase receptors. Thus, I [V = 2-Et2NC6H4, R1 = NH₂, R2 = H, W = S] was obtained by treating 4-Et2NC6H4COCH2Br with EtNHCONH2 and had IC₅₀ for inhibition of Tie-2 receptors of 0.27 μ M and for inhibition of KDR receptors of 1.10 μ M.

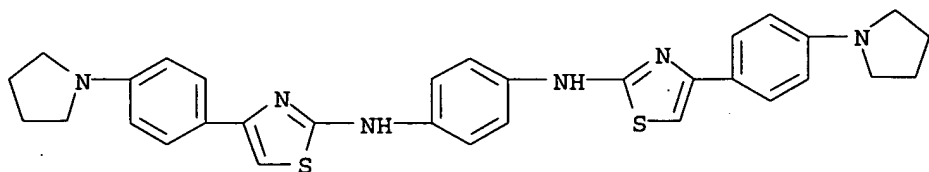
IT 572886-91-0P 572888-85-8P 572888-86-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-(hetero)aryl-substituted thia-, oxa-, and pyrazoles for inhibition of Tie-2)

RN 572886-91-0 CAPLUS

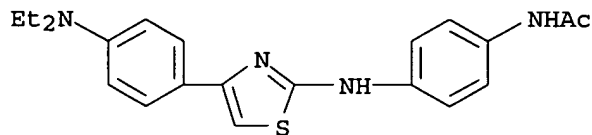
CN 1,4-Benzenediamine, N,N'-bis[4-[4-(1-pyrrolidinyl)phenyl]-2-thiazolyl]-, dihydrobromide (9CI) (CA INDEX NAME)



● 2 HBr

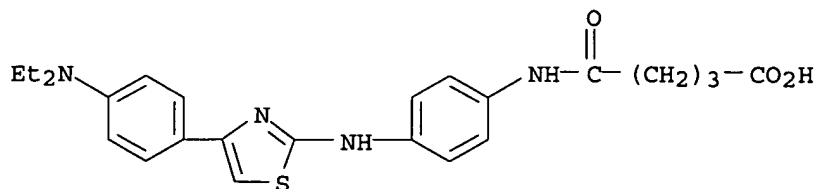
RN 572888-85-8 CAPLUS

CN Acetamide, N-[4-[[4-[4-(diethylamino)phenyl]-2-thiazolyl]amino]phenyl]- (9CI) (CA INDEX NAME)



RN 572888-86-9 CAPLUS

CN Pentanoic acid, 5-[[4-[[4-[4-(diethylamino)phenyl]-2-thiazolyl]amino]phenyl]amino]-5-oxo- (9CI) (CA INDEX NAME)



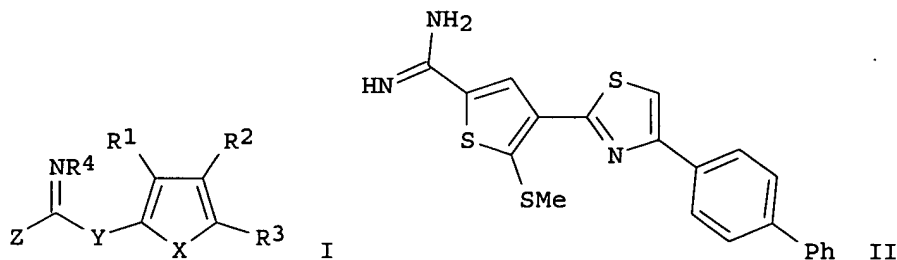
REFERENCE COUNT:

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THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 20 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:687446 CAPLUS
 DOCUMENT NUMBER: 135:242131
 TITLE: Preparation of thiophenecarboxamides and analogs as
 protease inhibitors
 INVENTOR(S): Illig, Carl R.; Subasinghe, Nalin L.; Hoffman, James
 B.; Wilson, Kenneth J.; Rudolph, M. Jonathan; Marugan,
 Juan Jose
 PATENT ASSIGNEE(S): 3-Dimensional Pharmaceuticals, Inc., USA
 SOURCE: U.S., 108 pp., Cont.-in-part of U. S. Ser. No.
 247,062.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6291514	B1	20010918	US 1999-372748	19990811
US 2001031781	A1	20011018	US 2001-828783	20010410
US 6403633	B2	20020611		
US 6562840	B1	20030513	US 2002-82127	20020226
PRIORITY APPLN. INFO.:			US 1998-74110P	P 19980209
			US 1999-247062	A2 19990209
			US 1999-372748	A1 19990811
			US 2001-828783	A1 20010410
OTHER SOURCE(S):		MARPAT 135:242131		
GI				



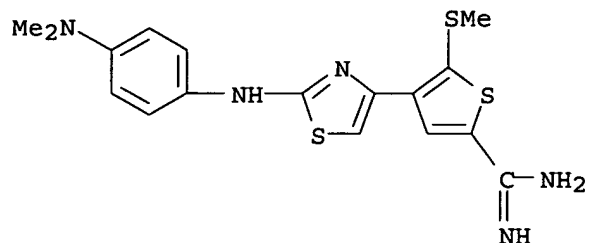
AB The title compds. [I; X = S; Y = a covalent bond, NH; Z = NR₅R₆; R₁ = H, NH₂, OH, halo; R₂ = alkylsulfonylamino, aralkylsulfonylamino, arylsulfonylamino, etc.; R₃ = H, alkylthio, alkyl, etc.; R₄-R₆ = H, alkyl, aryl, etc.] which are potent inhibitors of proteases, especially trypsin-like serine proteases, such as chymotrypsin, trypsin, plasmin and urokinase, were prepared and formulated. Thus, cyclocondensation of Me 4-(aminothioxomethyl)-5-methylthiophene-2-carboxylate with 4'-phenyl-2-bromoacetophenone followed by treatment of the resulting intermediate with with NH₄Cl/Me₃Al afforded the title compound II.HCl. Data for biol. activity of I were given.

IT 237383-08-3P 237383-28-7P 237383-48-1P
 237383-66-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiophenecarboxamides and analogs as protease inhibitors)

RN 237383-08-3 CAPLUS

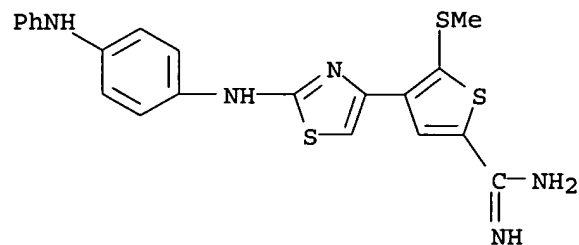
CN 2-Thiophenecarboximidamide, 4-[2-[[4-(dimethylamino)phenyl]amino]-4-thiazolyl]-5-(methylthio)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 237383-28-7 CAPLUS

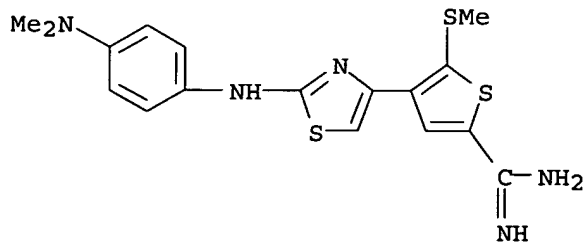
CN 2-Thiophenecarboximidamide, 5-(methylthio)-4-[2-[[4-(phenylamino)phenyl]amino]-4-thiazolyl]-, monohydrochloride (9CI) (CA INDEX NAME)



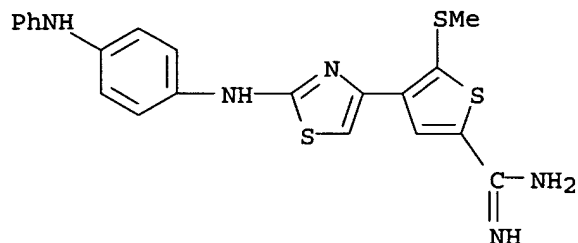
● HCl

RN 237383-48-1 CAPLUS

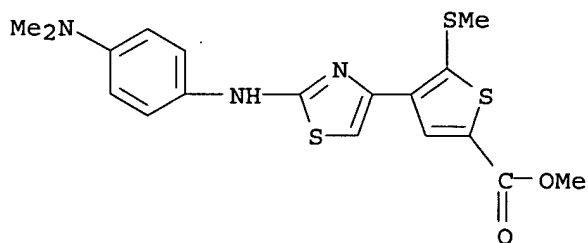
CN 2-Thiophenecarboximidamide, 4-[2-[[4-(dimethylamino)phenyl]amino]-4-thiazolyl]-5-(methylthio)- (9CI) (CA INDEX NAME)



RN 237383-66-3 CAPLUS
 CN 2-Thiophenecarboximidamide, 5-(methylthio)-4-[2-[[4-(phenylamino)phenyl]amino]-4-thiazolyl]- (9CI) (CA INDEX NAME)

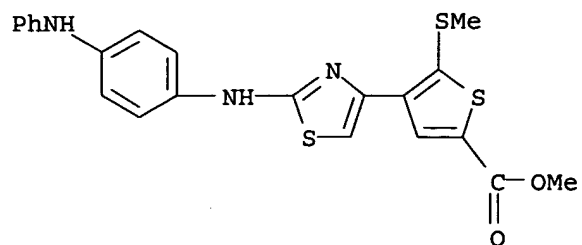


IT 237385-44-3P 237385-68-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of thiophenecarboxamidines and analogs as protease inhibitors)
 RN 237385-44-3 CAPLUS
 CN 2-Thiophenecarboxylic acid, 4-[2-[[4-(dimethylamino)phenyl]amino]-4-thiazolyl]-5-(methylthio)-, methyl ester, monohydrobromide (9CI) (CA INDEX NAME)



● HBr

RN 237385-68-1 CAPLUS
 CN 2-Thiophenecarboxylic acid, 5-(methylthio)-4-[2-[[4-(phenylamino)phenyl]amino]-4-thiazolyl]-, methyl ester, monohydrobromide (9CI) (CA INDEX NAME)



● HBr

REFERENCE COUNT:

54

THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 26 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:401652 CAPLUS

DOCUMENT NUMBER: 133:43516

TITLE: Preparation of bisthiazolyl compounds as MYT1 kinase inhibitors

INVENTOR(S): Lago, Maria A.

PATENT ASSIGNEE(S): SmithKline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000033842	A1	20000615	WO 1999-US28989	19991207
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1137415	A1	20011004	EP 1999-967226	19991207
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002531504	T2	20020924	JP 2000-586334	19991207
ZA 2000001963	A	20001018	ZA 2000-1963	20000418
US 6391894	B1	20020521	US 2001-857520	20010719
PRIORITY APPLN. INFO.:			US 1998-111329P	P 19981207
			WO 1999-US28989	W 19991207

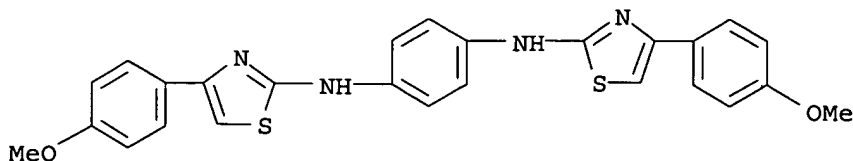
OTHER SOURCE(S): MARPAT 133:43516

AB Novel myt1 kinase receptor antagonists are provided. General methods of synthesis are given. E.g., bis[4-(2-pyridyl)thiazol-2-yl]amine was provided.

IT 36247-15-1P 274675-34-2P 274675-39-7P
274675-40-0P 274675-41-1P 274675-42-2PRL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of bisthiazolyl compds. as myt1 kinase inhibitors)

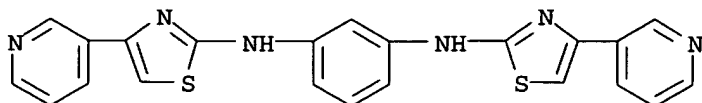
RN 36247-15-1 CAPLUS

CN 1,4-Benzenediamine, N,N'-bis[4-(4-methoxyphenyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)



RN 274675-34-2 CAPLUS

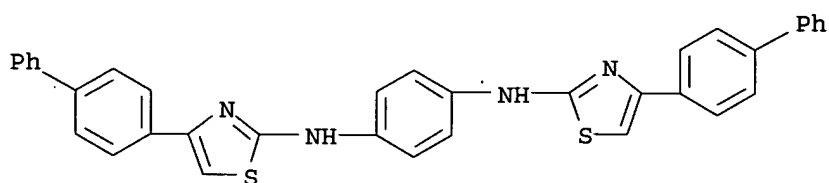
CN 1,3-Benzenediamine, N,N'-bis[4-(3-pyridinyl)-2-thiazolyl]-, dihydrobromide (9CI) (CA INDEX NAME)



● 2 HBr

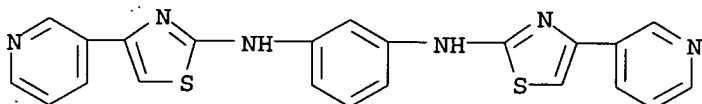
RN 274675-39-7 CAPLUS

CN 1,4-Benzenediamine, N,N'-bis(4-[1,1'-biphenyl]-4-yl-2-thiazolyl)- (9CI)
(CA INDEX NAME)



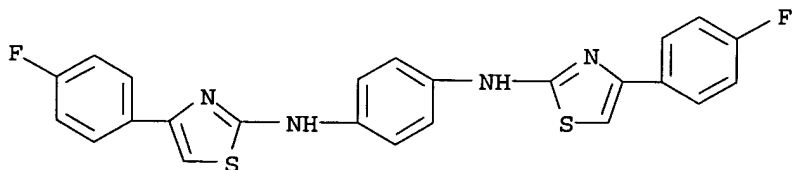
RN 274675-40-0 CAPLUS

CN 1,3-Benzenediamine, N,N'-bis[4-(3-phenyl)-2-thiazolyl]- (9CI) (CA
INDEX NAME)



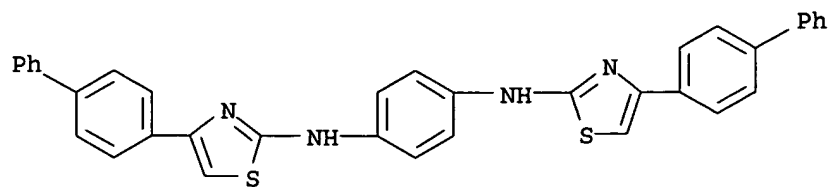
RN 274675-41-1 CAPLUS

CN 1,4-Benzenediamine, N,N'-bis[4-(4-fluorophenyl)-2-thiazolyl]- (9CI) (CA
INDEX NAME)



RN 274675-42-2 CAPLUS

CN 1,4-Benzenediamine, N,N'-bis(4-[1,1'-biphenyl]-4-yl-2-thiazolyl)-,
monohydrobromide (9CI) (CA INDEX NAME)



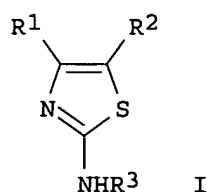
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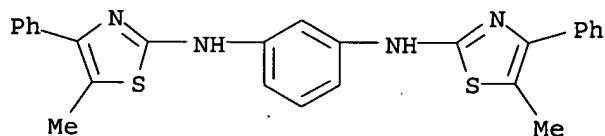
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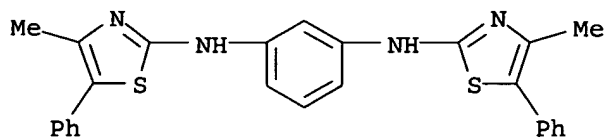
L19 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:271950 CAPLUS
 DOCUMENT NUMBER: 129:41096
 TITLE: Expedient synthesis of N-substituted 2-aminothiazoles
 AUTHOR(S): Schantl, Joachim G.; Lagoja, Irene M.
 CORPORATE SOURCE: Institut fur Organische Chemie, Universitat Innsbruck,
 Innsbruck, A-6020, Austria
 SOURCE: Synthetic Communications (1998), 28(8), 1451-1462
 CODEN: SYNCAV; ISSN: 0039-7911
 PUBLISHER: Marcel Dekker, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 129:41096
 GI



AB The reaction of α -halo ketones $R_1COCHXR_2$ ($R_1 = Ph, Me, R_2 = Me, Ph, H, X = Cl, Br$) with potassium thiocyanate and amines R_3NH_2 ($R_3 = Ph, PhCH_2, 3-, 4-H_2NC_6H_4$) offers the advantage of an efficient one-pot synthesis of the title compds. I from readily available starting materials.
 IT 208396-19-4P 208396-20-7P 208396-22-9P
 208396-23-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of aminothiazoles)
 RN 208396-19-4 CAPLUS
 CN 1,3-Benzenediamine, N,N'-bis(5-methyl-4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)

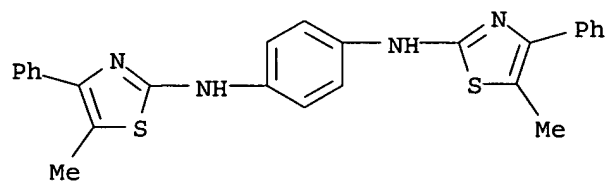


RN 208396-20-7 CAPLUS
 CN 1,3-Benzenediamine, N,N'-bis(4-methyl-5-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



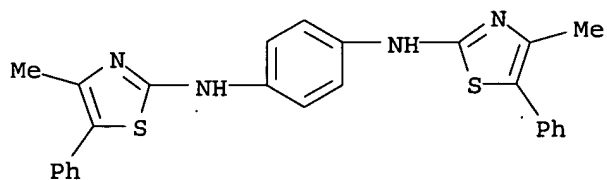
RN 208396-22-9 CAPLUS

CN 1,4-Benzenediamine, N,N'-bis(5-methyl-4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



RN 208396-23-0 CAPLUS

CN 1,4-Benzenediamine, N,N'-bis(4-methyl-5-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

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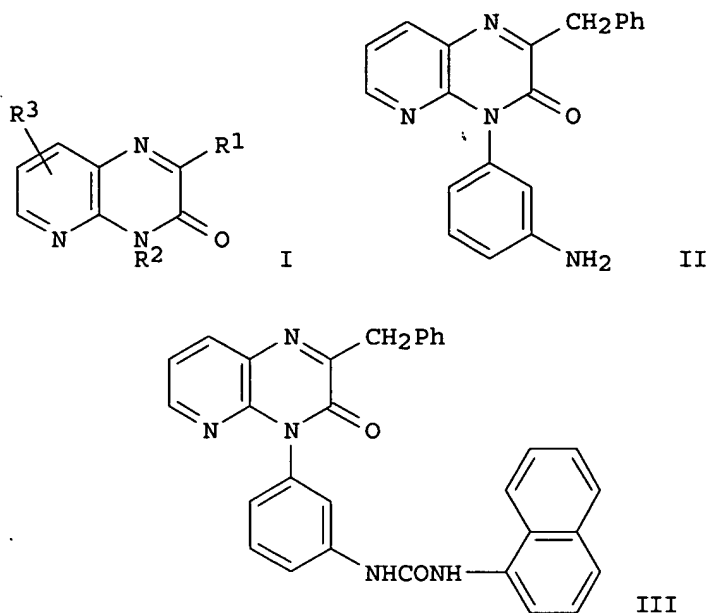
THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 29 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:264958 CAPLUS
 DOCUMENT NUMBER: 124:317209
 TITLE: Preparation of heterobicyclic derivatives as
 phosphodiesterase IV inhibitors and tumor necrosis
 factors
 INVENTOR(S): Hemmi, Keiji Di; Shimazaki, Norihiko; Watanabe,
 Shinya; Sawada, Akihiko
 PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9601825	A1	19960125	WO 1995-JP1366	19950710
W: AU, BR, CA, CN, FI, HU, JP, KR, MX, NO, NZ, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2194872	AA	19960125	CA 1995-2194872	19950710
AU 9528992	A1	19960209	AU 1995-28992	19950710
AU 698133	B2	19981022		
EP 770079	A1	19970502	EP 1995-924526	19950710
EP 770079	B1	20030212		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1157617	A	19970820	CN 1995-194959	19950710
CN 1051548	B	20000419		
JP 10502630	T2	19980310	JP 1995-504226	19950710
HU 77353	A2	19980330	HU 1997-68	19950710
EP 920867	A1	19990609	EP 1998-120297	19950710
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
RU 2170737	C2	20010720	RU 1997-101882	19950710
JP 3206003	B2	20010904	JP 1996-504226	19950710
AT 232531	E	20030215	AT 1995-924526	19950710
ES 2187561	T3	20030616	ES 1995-924526	19950710
PT 770079	T	20030630	PT 1995-924526	19950710
TW 383307	B	20000301	TW 1995-84107168	19950711
US 6426345	B1	20020730	US 1998-793451	19980130
HK 1004483	A1	20031024	HK 1998-103728	19980501
CN 1250776	A	20000419	CN 1999-111945	19990729
US 2002107251	A1	20020808	US 2002-50855	20020118
US 6727245	B2	20040427		

PRIORITY APPLN. INFO.:
 GB 1994-13975 A 19940711
 EP 1995-924526 A3 19950710
 WO 1995-JP1366 W 19950710
 US 1998-793451 A1 19980130

OTHER SOURCE(S): MARPAT 124:317209
 GI



AB Heterobicyclic derivs. [I; R1 = (un)substituted aryl, aralkyl, haloalkyl, protected carboxyalkyl, acylalkyl, heterocyclyl, etc.; R2 = (un)substituted aryl, heterocyclyl; R3 = H, alkoxy, alkylthio] and their salts are prepared. A mixture of amino compound II and 1-naphthyl isocyanate in dry dioxane was stirred at room temperature to give the ureido compound III, which

showed IC₅₀ of 3.1 x 10⁻⁸ M against phosphodiesterase IV and IC₅₀ of 5.6 x 10⁻⁸ M against human mononuclear cells.

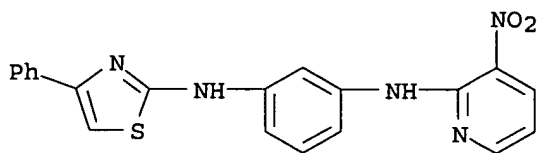
IT 176032-42-1P 176033-76-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of heterobicyclic derivs. as phosphodiesterase IV inhibitors and tumor necrosis factors.)

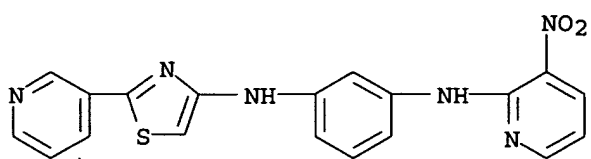
RN 176032-42-1 CAPLUS

CN 1,3-Benzenediamine, N-(3-nitro-2-pyridinyl)-N'-(4-phenyl-2-thiazolyl)-(9CI) (CA INDEX NAME)



RN 176033-76-4 CAPLUS

CN 1,3-Benzenediamine, N-(3-nitro-2-pyridinyl)-N'-(2-(3-pyridinyl)-4-thiazolyl)-(9CI) (CA INDEX NAME)



L19 ANSWER 39 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1970:3480 CAPLUS
 DOCUMENT NUMBER: 72:3480
 TITLE: 2-Substituted aminothiazoles
 INVENTOR(S): Dexter, Martin; Spivack, John D.
 PATENT ASSIGNEE(S): Geigy Chemical Corp.
 SOURCE: U.S., 15 pp. Continuation-in-part of U. S. 3299087
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3467666	A	19690916	US 1966-592278	19661107
PRIORITY APPLN. INFO.:			US 1966-592278	A 19661107

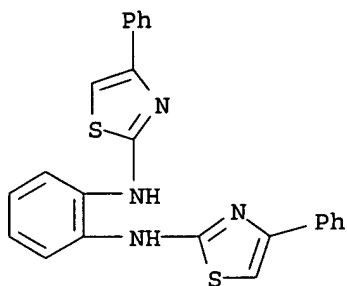
GI For diagram(s), see printed CA Issue.

AB Continuation-in-part of U.S. 3,299,087 (CA 66:85783t). The title compds. such as 2-(arylamino)-4-arylthiazoles, 2-(acenaphthylamino)-substituted thiazoles, 2,2'-iminobis (4-substituted thiazoles), 2-(arylamino)-4-alkylthiazoles, 2-(arylamino)-5-alkylthiazoles, 2-(arylamino)tetrahydrobenzothiazoles, and biphenyllylenebis(2-amino-4-substituted thiazoles) were prepared and used as heat and light stabilizers for polyolefins, animal and vegetable fats and oils, gasolines, jet fuel, and waxes. Thus, 15.4 parts phenacyl chloride in 50 parts C6H6 was added to 18.2 parts o-methoxyphenylthiourea in 150 parts EtOH to give I (X = o-MeOC6H4, R = H, R1 = Ph), m. 85-6° (iso-PrOH). Similarly prepared were the following I (X, R, R1, and m.p. given): o-hydroxyphenyl, H, Ph, 179-80° (C6H6); o-aminophenyl, H, Ph, 163-5° (iso-PrOH); p-aminophenyl, H, Ph, 133-5° (C6H6); m-hydroxyphenyl, H, Ph, 123-5° (ClCH2CH2Cl); m-aminophenyl, H, Ph, 160-2° (iso-PrOH); p-hydroxyphenyl, Ph, Ph, 152-3° (C6H6); 3,5-di-tert-butyl-4-hydroxyphenyl, H, Ph, 192-4° (petroleum ether); 5-(1,1,3,3-tetramethylbutyl)-2-hydroxyphenyl, H, Ph, 159-60° (C6H6-hexane); p-(diethylamino)-phenyl, H, Ph, 149-50° (C6H6); p-acetamidophenyl, H, Ph, 179-80° (iso-PrOH); m-acetamidophenyl, H, Ph, 145-6° (Cl-CH2CH2Cl-C6H6); p-lauramidophenyl, H, Ph, 150-1° (C6H6); p-lauramidophenyl, H, p-tert-butylphenyl, 163.5-4.5° (C6H6); p-stearamidophenyl, H, Ph, 146-7.5° (CHCl3); 2-hydroxy-5-tert-octylphenyl, lauroyl, Ph, 106.5-8°; p-acetamidophenyl, H, p-tert-butylphenyl, 198-200° (aqueous EtOH); m-acetamidophenyl, H, p-tert-butylphenyl, 139-40° (ClCH2CH2Cl-C6H6); α-naphthyl, H, p-tert-butylphenyl, 214-15° (C6H6); p-diethylaminophenyl, H, p-tert-butylphenyl, 231-3° (C6H6); p-anilinophenyl, H, p-tert-butylphenyl, 162-3° (iso-PrOH); p-aminophenyl, Me, p-tert-butylphenyl, 161-2° (C6H6-hexane and EtOH); p-aminobiphenyl, H, p-tert-butylphenyl, 187-8° (C6H6 and iso-PrOH-C6H6); p-aminophenyl, H, p-n-dodecylphenyl, 121° (iso-PrOH); m-hydroxyphenyl, H, p-n-dodecylphenyl, 140° (iso-PrOH); p-hydroxyphenyl, H, p-n-dodecylphenyl, 136-7° (C6H6); p-methoxyphenyl, H, p-n-dodecylphenyl, 106° (C6H6-hexane); o-aminophenyl, H, p-n-dodecylphenyl, 122-4° (iso-PrOH); p-aminobiphenyl, H, p-n-dodecylphenyl, 170-5° (iso-PrOH-CHCl3). I (X = p-HOC6H4, R = H, R1 = Ph), m. 203° (iso-PrOH), was prepared by treating p-aminophenol with 2-amino-4-phenylthiazole hydroiodide in ethylene glycol at 185° under N. A mixture of 10.5 parts p-tert-butylphenacyl chloride in 25 parts C6H6 was added in 10 min to a

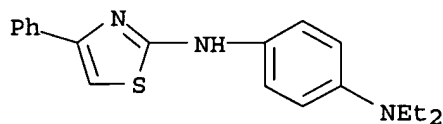
dispersion of 11.4 parts 1-(5-acenaphthyl)thiourea in 75 parts EtOH, and heated for 3 hr at 75° to give I (X = 5-acenaphthyl, R = H, R1 = p-tert-BuC6H4), m. 198-200° (C6H6-hexane). A mixture of 21 parts p-tert-butylphenacyl chloride in 35 parts C6H6 was added dropwise at 55° to a dispersion of 6.7 parts 2,4-dithiobiuret in 100 parts EtOH and refluxed 3 hr at 75° under N to give 26 parts II (R2 = p-tert-BuC6H4) (IIa), m. 256-7° (C6H6-iso-PrOH). Similarly prepared were the following II (R2 and m.p. given): hendecyl, 80-1° (hexane); tert-Bu, 114-15° (aqueous EtOH); p-n-dodecylphenyl, 104-5° (iso-PrOH). A solution of 7 parts chloropropanone in 25 parts C6H6 was added to a dispersion of 12 parts p-aminophenylthiourea in 150 parts EtOH to give 7 parts I (X = p-H2NC6H4, R = H, R1 = Me), m. 140-1° (C6H6). Similarly were prepared the following I (X, R, R1, and m.p. given): o-aminophenyl, H, Me, 147-8° (iso-PrOH); m-aminophenyl, H, Me, -; 5-(1,1,3,3-tetramethylbutyl)-2-hydroxyphenyl, H, Me, 158-60° (cyclohexane); 3,5-tert-butyl-4-hydroxyphenyl, H, Me, 174-5° (C6H6-hexane); p-aminophenyl, H, tert-butyl, 145-6° (C6H6); o-hydroxyphenyl, H, tert-Bu, 145-5.5° (C6H6); p-hydroxyphenyl, H, tert-Bu, 178-9° (C6H6); o-methoxyphenyl, H, tert-Bu, -; p-methoxyphenyl, H, tert-Bu, 117-19° (C6H6-hexane); m-hydroxyphenyl, H, tert-Bu, 149-51° (C6H6); α-naphthyl, H, tert-Bu, 89-90° (petroleum ether-hexane); 5-(1,1,3,3-tetramethylbutyl)-2-hydroxyphenyl, H, tert-Bu, 128-9° (C6H6-hexane); 3,5-di-tert-butyl-4-hydroxyphenyl, H, tert-Bu, 113-14° (petroleum ether); p-hydroxyphenyl, Ph, tert-Bu, 161-2.5° (water-iso-PrOH); o-aminophenyl, H, tert-Bu, 134-5° (C6H6); m-aminophenyl, H, tert-Bu, 101-2° (CCl4); o-hydroxyphenyl, H, n-hendecyl, 122-3° (iso-PrOH); o-aminophenyl, H, n-hendecyl, 93-4° (hexane); p-aminophenyl, H, n-hendecyl, 70-1° (CCl4); p-hydroxyphenyl, H, n-hendecyl, 85-6° (hexane); o-methoxyphenyl, H, n-hendecyl, 47-8.5° (hexane); p-methoxyphenyl, H, n-hendecyl, 58-60° (petroleum ether); α-naphthyl, H, n-hendecyl, 58-60° (iso-PrOH). A solution of 9.65 parts α-bromoheptaldehyde in 25 parts C6H6 was added dropwise at 25-30° in 10 min to a dispersion of 8.4 parts p-hydroxyphenylthiourea in 75 parts EtOH, and refluxed 2 hr under N to give 7.5 parts 2-p-hydroxyanilino-5-n-pentylthiazole hydrochloride, m. 152-4°, which was dissolved in H2O-EtOH and treated with NaHCO3 to give 2-(o-hydroxyanilino)-5-n-pentylthiazole, m. 90-2°. 2-(o-Hydroxyanilino)-4-methyl-5-tert-butylthiazole, m. 133-5°, was similarly prepared. A solution of 15.0 parts 1-bromo-3,3-dimethyl-2-butanone in 25 parts C6H6 was added dropwise at 35° to a dispersion of 9.0 parts p-phenylenedithiourea in 100 parts Me Cellosolve in 20 min and refluxed 4.5 hr under N to give 14 parts III (R3 = tert-Bu, R4 = H, Y = p-phenylene) m. 199-202° (ClCH2CH2Cl-C6H6). Similarly prepared were the following III (R3, R4, Y, and m.p. given): Me, H, p-phenylene, 227-9° (MeOH-iso-PrOH); Me, H, o-phenylene, 167-8° (iso-PrOH); Ph, H, o-phenylene, 135-6° (CCl4); Ph, H, o-phenylene, 228-9° (iso-PrOH); tert-butylphenyl, H, p-phenylene, 253-5° (ClCH2CH2Cl); p-tert-butylphenyl, Ph, p-phenylene, 219-20° (iso-PrOH-C6H6). A dispersion of 13 parts 2-chlorocyclohexanone and 16.8 parts o-hydroxyphenylthiourea in 150 parts EtOH was refluxed 3 hr to give IV (X = o-HOC6H4), m. 191-2° (iso-PrOH). Similarly prepared were the following IV (X and m.p. given): α-naphthyl, 188-9° (EtOH); o-aminophenyl, 184° (iso-PrOH); p-hydroxyphenyl, 164-5° (C6H6). A solution of 14.3 parts 1-bromo-3,3-dimethyl-2-butanone in 26 parts C6H6 was added dropwise in 10 min at 27° to a dispersion of 12.8 parts p-biphenylenebis(2-thiourea) in 127 parts Me Cellosolve and heated 4 hr at 80° to give 16 parts III (R3 = tert-Bu, R4 = H, Y =

p-biphenylylene), m. 243-4° (C₆H₆-CHCl₃). Similarly prepared were the following III (R₃ = H, Y = biphenylylene) (R₄ and m.p. given): Ph, 276-8° (pyridine-C₆H₆); p-n-dodecylphenyl, 2 58-63° (tetrahydrofuran-C₆H₆); n-undecyl, 149-51° (CHCl₃). Un-stabilized polypropylene was blended with 0.5% IIa and the blended material was milled on a 2-roll mill at 182° for 10 min. The blend was sheeted from the mill and the sheet was cut into small pieces which were pressed 7 min at 218° and 2000 psi. The resultant 25-mil thick sheet was tested for resistance to accelerated aging in a forced draft oven at 149°. The sample crazed after 500 hr exposure, while polypropylene alone crazed after 3 hr. The compds. were also used to prepare stabilized mineral oil, gasoline, lard, high temperature lubricants, heptaldehyde, cyclohexene, paraffin wax, natural rubber, polyisoprene rubber, and styrene-butadiene rubber.

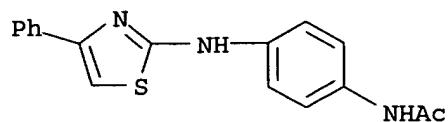
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 1619-44-9P 1619-45-0P 1619-46-1P
 1619-48-3P 1619-49-4P 1626-62-6P
 1745-28-4P, Thiazole, 2,2'-(p-phenylenediimino)bis[4-(p-tert-butylphenyl)- 1750-98-7P 2027-72-7P 2138-96-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 1614-24-0 CAPLUS
 CN Thiazole, 2,2'-(o-phenylenediimino)bis[4-phenyl- (7CI, 8CI) (CA INDEX NAME)



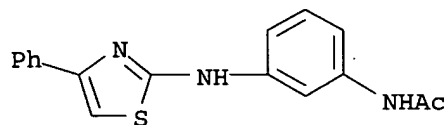
RN 1619-42-7 CAPLUS
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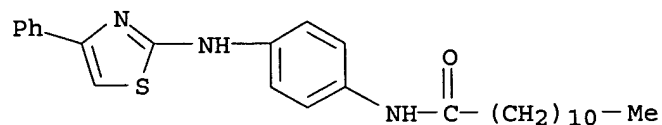
RN 1619-43-8 CAPLUS
 CN Acetanilide, 4'-[(4-phenyl-2-thiazolyl)amino]- (7CI, 8CI) (CA INDEX NAME)



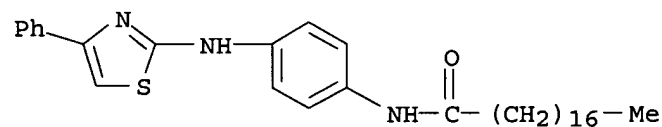
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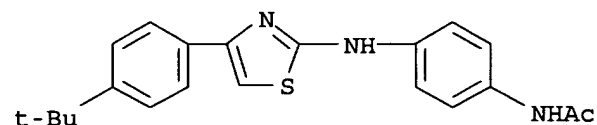
RN 1619-45-0 CAPLUS
 CN Dodecananilide, 4'-[(4-phenyl-2-thiazolyl)amino]- (7CI, 8CI) (CA INDEX NAME)



RN 1619-46-1 CAPLUS
 CN Octadecananilide, 4'-[(4-phenyl-2-thiazolyl)amino]- (7CI, 8CI) (CA INDEX NAME)

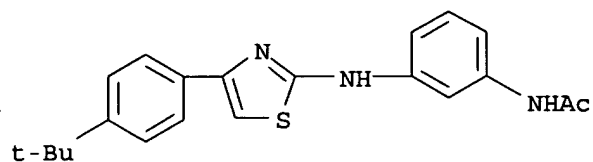


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 CN Acetanilide, 4'-[[4-(p-tert-butylphenyl)-2-thiazolyl]amino]- (7CI, 8CI) (CA INDEX NAME)

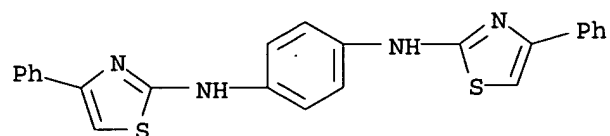


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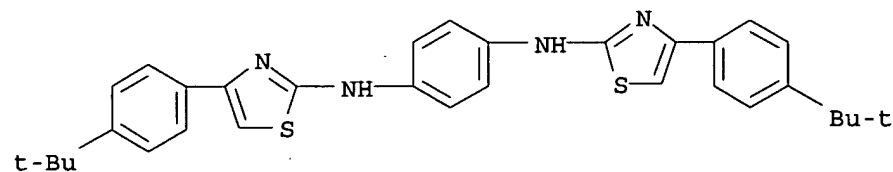
CN Acetanilide, 3'-[[4-(p-tert-butylphenyl)-2-thiazolyl]amino]- (7CI, 8CI)
(CA INDEX NAME)



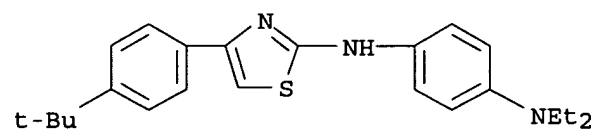
RN 1626-62-6 CAPLUS
CN 1,4-Benzenediamine, N,N'-bis(4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



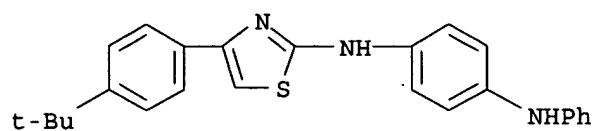
RN 1745-28-4 CAPLUS
CN Thiazole, 2,2'-(p-phenylenediimino)bis[4-(p-tert-butylphenyl)- (7CI, 8CI)
(CA INDEX NAME)



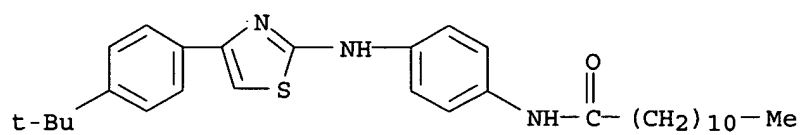
RN 1750-98-7 CAPLUS
CN Thiazole, 4-(p-tert-butylphenyl)-2-[p-(diethylamino)anilino]- (7CI, 8CI)
(CA INDEX NAME)



RN 2027-72-7 CAPLUS
CN Thiazole, 2-(p-anilinoanilino)-4-(p-tert-butylphenyl)- (7CI, 8CI) (CA
INDEX NAME)



RN 2138-96-7 CAPLUS
CN Dodecananilide, 4'-[[4-(p-tert-butylphenyl)-2-thiazolyl]amino]- (7CI, 8CI)
(CA INDEX NAME)



L19 ANSWER 42 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1965:498377 CAPLUS
 DOCUMENT NUMBER: 63:98377
 ORIGINAL REFERENCE NO.: 63:18098h,18099a-h,18100a-h,18101a-b
 TITLE: 2-Substituted aminothiazoles
 INVENTOR(S): Spivack, John D.; Dexter, Martin
 SOURCE: 14 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3201409		19650817	US	19610424

GI For diagram(s), see printed CA Issue.

AB The title compds. (I-IV) are antioxidants and stabilizers for lubricating oils, hydrocarbons, polyolefins, elastomers, animal and vegetable fats, and aldehydes when incorporated at a level of 0.01-1%; an example for each is given. The thiazoles are prepared by condensation of an arylthiourea with an α -halocarbonyl compound. Preps. of the new thioureas (VII) tabulated are not given. A mixture of BzCH₂Cl 15.4 in C₆H₆ 50 and 2-MeOC₆H₄NHCSNH₂ 18.2 in EtOH 150 parts was refluxed several hrs., diluted with 300 parts H₂O, neutralized with saturated NaHCO₃, and extracted with Et₂O to give 22 parts 2-o-methoxyanilino-4-phenylthiazole, m. 85-6° (iso-PrOH). Compds. similarly prepared are tabulated. Reacting 4-HOC₆H₄NH₂ 22 with 2-amino-4-phenylthiazole-HI 15 in ethylene glycol 250 parts at 185° under N₂ gave 5 parts 2-p-hydroxyanilino-4-phenylthiazole (VIII). Salts isolated were IX.HCl, m. 255-7°, and X.HCl, m. 152-4°. Formula, R, R₁, R₂, R₃, R₄, R₅, R₆, Parts thiourea compound, Parts carbonyl compound, Parts product, M.p., Solvent; I, H, H, -, OH, H, H, 16.8, 15.4, 19, 179-80, a; I, H, H, -, NH₂, H, H, H, 16.7 15.4, 12, 163-5, a; I, H, H, -, H, H, NH₂, H, 16.7, 15.4, 15, 133-5, a; I, H, H, -, H, OH, H, H, 16.8, 15.4, 14, 123-5, C₂H₄Cl₂; I, H, H, -, H, NH₂, H, H, 16.7, 15.4, 15, 160-2, b; I, Ph, H, -, H, H, OH, H, 11, 6.2, 14.9, 152-3, a; I, H, H, -, H, tert-Bu, OH, tert-Bu, 5, 2.74, 4, 192-4, c; I, H, H, -, OH, H, H, tert-octyl, 14, 7.7, 21, 159-60, a-d; I, H, H, -, H, H, NEt₂, H, 11.5, 7.7, 7.5, 149-50, a; I, H, H, -, H, H, OH, H, -, -, -, 203, b; I (IX), H, H, -, H, H, NHAc, H, 10.5, 7.7, 15.3, 179-80, b; I, H, H, -, H, NHAc, H, H, 10.5, 7.7, 18.5, 145-6, C₂H₄Cl₂-a; I, H, H, -, H, H, NHCOC₁₁H₂₃, H, 17.5, 7.7, -, 150-1, a; I, H, tert-Bu, -, H, H, NHCOC₁₁H₂₃, H, 17.5, 10.5, 17.3, 163.5-4.5, a; I, H, H, -, H, H, NHCOC₁₇H₃₅, H, 15, 5.3, 12.6, 146-7.5, CHCl₃; I, COC₁₁H₂₃, H, -, OH, H, H, tert-octyl, 5.5, 3.1, -, 106.5-8, d; I, Ac, H, -, OH, H, H, tert-octyl, 5.5, 1.09, -, -, -, I, COC₁₇H₃₅, H, -, OH, H, H, tert-octyl, 5.5, 4.23, -, -, -, I, H, tert-Bu, -, H, H, NHAc, H, -, -, 16.5, 198-200, aqueous EtOH; I, H, tert-Bu, -, H, NHAc, H, H, -, -, -, 139-40, C₂H₄Cl₂-a; I, H, tert-Bu, -, (R₃R₄ : benzo), H, H, 10, 11, 10, 214-15, a; I, H, tert-Bu, -, H, H, NEt₂, H, 13, 13, 18, 231-3, a; I, H, tert-Bu, -, H, H, NHPh, H, -, 10.5, 19, 162-3, b; I, Me, tert-Bu, -, H, H, NH₂, H, 7.83, 9.1, 15.9, 161-2, EtOH; I, C₆H₁₃, tert-Bu, -, H, H, NH₂, H, 15.1, 9.1, -, -, -, I, H, tert-Bu, -, H, H, 4-C₆H₄NH₂, H, 6, 4.2, 7, 187-8, a; I, H, C₁₂H₂₅, -, H, H, NH₂, H, 4.2, 8.1, 10, 121, b; I, H, C₁₂H₂₅, -, H, tert-Bu, OH, H, 5.3, -, -, -, -, I, H, C₁₂H₂₅, -, H, C₁₂H₂₅, OH, H, 8.4, -, -, -, -, I, H, C₁₂H₂₅, -, H, C₁₃H₃₇, OH, H, -, -, -, -, -, I, H, C₁₈H₃₇, -, H, H, NH₂, H, -, 10.2, -, -, -, -, I, H, C₁₂H₂₅, -, OH, H, H, H, 5, 8.1, 9, 140, b; I, H, C₁₂H₂₅, -, H, H, OH, H, 4.2, 8.1, 10, 136-7, a; I, H, C₁₂H₂₅, -, H, H,

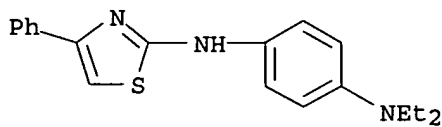
OMe, H, 4.5, 8.1, 11.5, 106, a-d; I, H, C12H25, -, NH2, H, H, H, 5, 8.1, 3, 122-4, b; I, H, C12H25, -, H, H, 4-C6H4NH2, H, 7.29, 9.6, 2.9, 170-5, b-CHCl3; I, H, tert-Bu, -, (R3R4R5 : 5-acenaphthyl), -, 11.4, 10.5, 14, 198-200, a-d; II, H, Me, H, H, H, NH2, H, 12, 7, 7, 140-1, a; II, H, C6H13, H, H, H, NH, H, 12, 6.5, -, -, -; II, H, Me, H, NH2, H, H, H, 18, 10, 4, 147-8, b; II, H, Me, H, H, NH2, H, H, 16.7, 9.2, -, liquid, -; II, H, Me, H, OH, H, H, tert-octyl, 11, 3.6, 11, 158-60, cyclohexane; II, H, Me, H, H, tert-Bu, OH, tert-Bu, 5, 1.7, 4, 174-5, a-d; II, H, tert-Bu, H, H, NH2, H, 9, 9, 16.9, 145-6, a; II, H, C8H17, H, H, H, NH2, H, 9, 9.5, -, -, -; II, H, tert-Bu, H, OH, H, NH2, C12H25, 18.3, 9, -, -, -; II, H, tert-Bu, H, OH, H, H, C18H22, 21, 9, -, -, -; II, H, C18H37, H, H, H, H, 9, 16.5, -, -, -; II, H, C12H25, H, H, H, NH2, H, 9, 12.3, -, -, -; II, H, tert-Bu, H, OH, H, H, H, 9, 9, 12.4, 145-5.5, a; II, H, tert-Bu, H, H, H, OH, H, 9, 9, 14.5, 178-9, a; II, H, tert-Bu, H, OMe, H, H, H, 9.2, 9, 11.5, liquid, -; II, H, tert-Bu, H, H, H, OMe, H, 9, 9, 11, 117-19, a-d; II, H, tert-Bu, H, H, OH, H, H, 16.8, 17.9, 17.5, 149-51, a; II, H, tert-Bu, H, (R3R4 : benzo), H, H, 10, 8.9, 13, 89-90, c-d; II, H, tert-Bu, H, OH, H, H, tert-octyl, 14, 8.9, 18.5, 128-9, a-d; II, H, tert-Bu, H, H, tert-Bu, OH, tert-Bu, 5, 3.2, 5, 113-14, c; II, Ph, tert-Bu, H, H, H, OH, H, 12.2, 8.9, 16, 161-2.5, aqueous b; II, H, tert-Bu, H, NH2, H, H, H, 9, 9, 11.8, 134-5, a; II, H, tert-Bu, H, H, NH3, H, H, 16.7, 17.9, 15, 101-2, CCl4; II, H, C11H23, H, OH, H, H, H, 4.5, 6.9, 10.5, 122-3, b; II, H, C11H23, H, NH2, H, H, H, 4.5, 6.9, 7.5, 93-4, d; II, H, C11H23, H, H, H, NH2, H, 4.5, 6.9, 5.2, 70-1, CCl4; II, H, C11H23, H, H, H, OH, H, 4.5, 6.9, 8, 85-6, d; II, H, C11H23, H, OMe, H, H, H, 4.5, 6.9, 9, 47-8.5, d; II, H, C11H23, H, H, H, OMe, H, 4.5, 6.9, 9, 58-60, c; II, H, C11H23, H, (R3R4 : benzo), H, H, 2.9, 4, 5.4, 58-60, b; II (X), H, H, C6H11, H, H, OH, H, 8.4, 9.65, 7.5, 105-6, a-d; (HCl); II, H, H, C5H11, OH, H, H, H, 8.4, 9.65, 13.7, 90-2, a-d; II, H, H, Me, OH, H, H, H, 8.4, 4.6, -, -, -; II, H, H, C12H25, OH, H, H, H, 8.4, 12.3, -, -, -; II, H, H, C18H37, OH, H, H, H, 8.4, 16.5, -, -, -; II, H, Me, tert-Bu, OH, H, H, H, 5.6, 5, 3, 133-5, d; II, H, C6H13, tert-Bu, OH, H, H, H, 5.6, 7.4, -, -, -; II, H, C12H25, tert-Bu, OH, H, H, H, 5.6, 11.2, -, -, -; II, H, C18H37, tert-Bu, OH, H, H, H, 5.6, 12.8, -, -, -; II, H, [R1R2 : (CH2)4], OH, H, H, H, 16.8, 13, -, 191-2, b; II, H, [R1R2 : (CH2)4], (R3R4 : benzo), H, H, 20.2, 13, 10, 188-9, EtOH; II, H, [R1R2 : (CH2)4], NH, H, H, H, 16.7, 13, 6, 184, b; II, H, [R1R2 : (CH2)4], H, H, OH, H, 16.8, 13.2, 8, 164-5, a; III, - 4-tert-BuC6H4, -, -, -, -, -, 6.7, 21, 26, 256-7, a-b; III, -, 4-C18H37C6H4, -, -, -, -, -, 40.6, -, -, -; III, -, C11H23, -, -, -, -, -, 2.7, 11.1, 10, 80-1, b; III, -, tert-Bu, -, -, -, -, -, 6.7, 17.9, 13, 114-15, aqueous EtOH; III, -, 4-C12H25C6H4, -, -, -, -, -, 3.5, 16.2, 11.5, 104-5, b; IV, H, Me, -, -, -, -, -, 5.5, 5, 1.4, 167-8, b; IV, H, Ph, -, -, -, -, -, 11.3, 15.4, 15, 135-6, CCl4; V, H, tert-Bu, -, -, -, -, -, 9, 15, 14, 199-202, C2H4Cl2; V, H, C12H25, -, -, -, -, -, 9, 19.7, -, -, -; V, H, C18H37, -, -, -, -, -, 9, 26.4, -, -, -; V, H, Me, -, -, -, -, -, 11.3, 9.2, 5, 227-9, MeOH-b; V, H, Ph, -, -, -, -, -, 24, 31, 228-9, b; V, H, 4-tert-BuC6H4, -, -, -, -, -, 11.5, 21, -, 253-5, C2H4Cl2, V, Ph, 4-tert-BuC6H4, -, -, -, -, -, 13.6, 19, 19, 219-20, b-a; VI, -, tert-Bu, -, -, -, -, -, 12.8, 14.3, 16, 243-4, a-CHCl3, VI, -, Ph, -, -, -, -, -, 12.8, 12.3, 15, 276-8, C6H6N-a; VI, -, 4-C12H25C6H4, -, -, -, -, -, 6.5, 12.9, 15, 258-63, tetrahydrofuran-a; VI, -, C11H23, -, -, -, -, -, 6.5, 11.1, 12, 149-51, CHCl3; VII, H, -, -, -, OH, H, H, tert-octyl, -, -, -, 160-1, -; VII, H, -, -, -, H, H, 4-H2NC6H4, H, -, -, -, 270, -; VII, H, -, -, -, H, H, PhNH, H, -, -, -, 198, -; VII, H, -, -, -, H, H, NHAc, H, -, -, -, 204-5, -; VII, H, -, -, -, H, H, HNAC, H, H, -, -, -, 194-5, -; VII, H, -, -, -, H, H, NHCOC11H23, H, -, -, -, 196-208, -; VII, H, -, -, -, H, H, NHCOC17H35, H, -, -, -, 202-6, -; VII, Me, -, -, -, H, H, NH2, H, -, -, -, 177-8, -; VII, H, -, -, -, H, H, 4-C6H4NHCSNH2, H, -, -, -, 270, -; VII, Ph, -, -, -, H, H, NHCSNH2, H, -, -, -, 218, -; Solvents: a : C6H6; b : iso-PrOH; c :

petroleum ether; d : hexane,;

IT 1619-42-7, Thiazole, 2-[p-(diethylamino)anilino]-4-phenyl-
 1619-43-8, Acetanilide, 4'-[(4-phenyl-2-thiazolyl)amino]-
 1619-44-9, Acetanilide, 3'-[(4-phenyl-2-thiazolyl)amino]-
 1619-45-0, Dodecananilide, 4'-[(4-phenyl-2-thiazolyl)amino]-
 1619-46-1, Octadecanilide, 4'-[(4-phenyl-2-thiazolyl)amino]-
 1619-48-3, Acetanilide, 4'-[[4-(p-tert-butylphenyl)-2-
 thiazolyl]amino]- 1619-49-4, Acetanilide, 3'-[[4-(p-tert-
 butylphenyl)-2-thiazolyl]amino]- 1626-62-6, Thiazole,
 2,2'-(p-phenylenediimino)bis[4-phenyl- 1745-28-4, Thiazole,
 2,2'-(p-phenylenediimino)bis[4-(p-tert-butylphenyl)- 1750-98-7,
 Thiazole, 4-(p-tert-butylphenyl)-2-[p-(diethylamino)anilino]-
 2027-72-7, Thiazole, 2-(p-anilinoanilino)-4-(p-tert-butylphenyl)-
 2138-95-6, Acetanilide, 4'-[(4-phenyl-2-thiazolyl)amino]-,
 hydrochloride 2138-96-7, Dodecananilide, 4'-[[4-(p-tert-
 butylphenyl)-2-thiazolyl]amino]- 2505-65-9, Thiazole,
 4-(p-tert-butylphenyl)-2-[p-[N-[4-(p-tert-butylphenyl)-2-
 thiazolyl]anilino]anilino]- 4309-45-9, Thiazole,
 2,2'-(m-phenylenediimino)bis[4-phenyl-
 (preparation of)

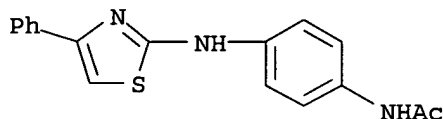
RN 1619-42-7 CAPLUS

CN Thiazole, 2-[p-(diethylamino)anilino]-4-phenyl- (7CI, 8CI) (CA INDEX NAME)



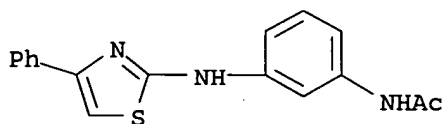
RN 1619-43-8 CAPLUS

CN Acetanilide, 4'-[(4-phenyl-2-thiazolyl)amino]- (7CI, 8CI) (CA INDEX NAME)



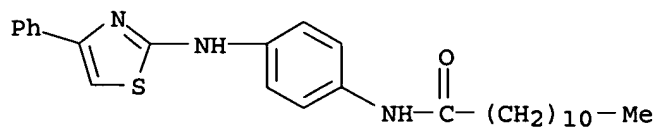
RN 1619-44-9 CAPLUS

CN Acetanilide, 3'-[(4-phenyl-2-thiazolyl)amino]- (7CI, 8CI) (CA INDEX NAME)

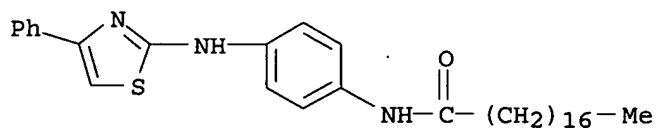


RN 1619-45-0 CAPLUS

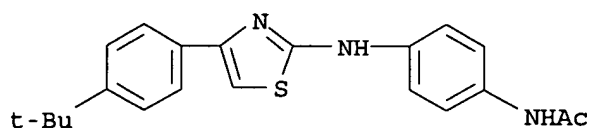
CN Dodecananilide, 4'-[(4-phenyl-2-thiazolyl)amino]- (7CI, 8CI) (CA INDEX NAME)



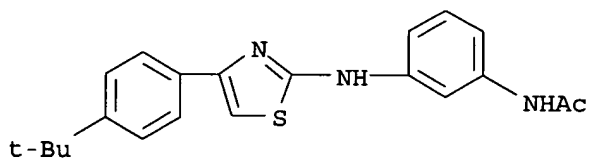
RN 1619-46-1 CAPLUS
 CN Octadecananilide, 4'-[(4-phenyl-2-thiazolyl)amino]- (7CI, 8CI) (CA INDEX NAME)



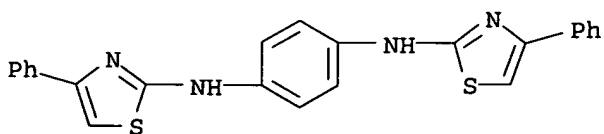
RN 1619-48-3 CAPLUS
 CN Acetanilide, 4'-[[4-(p-tert-butylphenyl)-2-thiazolyl]amino]- (7CI, 8CI) (CA INDEX NAME)



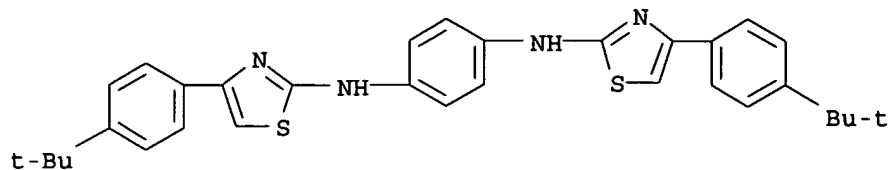
RN 1619-49-4 CAPLUS
 CN Acetanilide, 3'-[[4-(p-tert-butylphenyl)-2-thiazolyl]amino]- (7CI, 8CI) (CA INDEX NAME)



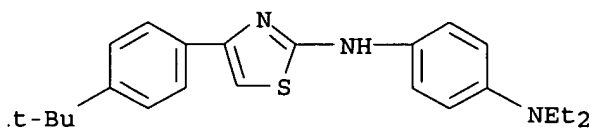
RN 1626-62-6 CAPLUS
 CN 1,4-Benzenediamine, N,N'-bis(4-phenyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



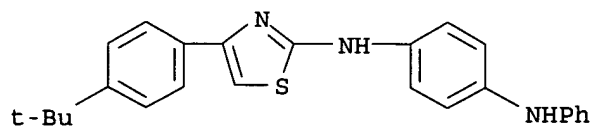
RN 1745-28-4 CAPLUS
 CN Thiazole, 2,2'-(p-phenylenediimino)bis[4-(p-tert-butylphenyl)- (7CI, 8CI)
 (CA INDEX NAME)



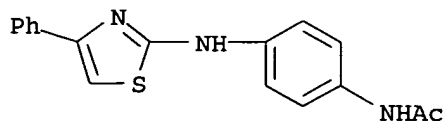
RN 1750-98-7 CAPLUS
 CN Thiazole, 4-(p-tert-butylphenyl)-2-[p-(diethylamino)anilino]- (7CI, 8CI)
 (CA INDEX NAME)



RN 2027-72-7 CAPLUS
 CN Thiazole, 2-(p-anilinoanilino)-4-(p-tert-butylphenyl)- (7CI, 8CI) (CA
 INDEX NAME)



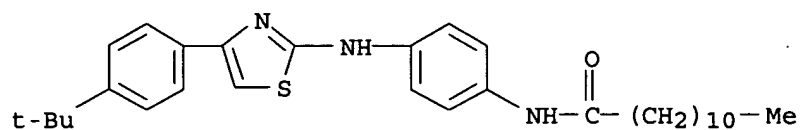
RN 2138-95-6 CAPLUS
 CN Acetanilide, 4'-[(4-phenyl-2-thiazolyl)amino]-, monohydrochloride (8CI)
 (CA INDEX NAME)



● HCl

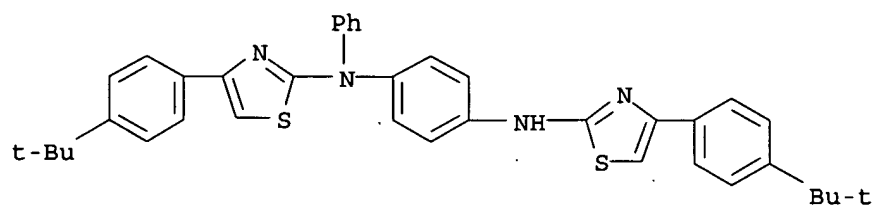
RN 2138-96-7 CAPLUS

CN Dodecananilide, 4'-[[4-(p-tert-butylphenyl)-2-thiazolyl]amino]- (7CI, 8CI)
(CA INDEX NAME)



RN 2505-65-9 CAPLUS

CN Thiazole, 4-(p-tert-butylphenyl)-2-[p-[N-[4-(p-tert-butylphenyl)-2-thiazolyl]anilino]anilino]- (7CI, 8CI) (CA INDEX NAME)



RN 4309-45-9 CAPLUS

CN Thiazole, 2,2'-(m-phenylenediimino)bis[4-phenyl]- (7CI, 8CI) (CA INDEX NAME)

